

WHAT IS CLAIMED IS:

1. A DNA segment encoding a human type α PDGF receptor protein.
2. A DNA segment according to claim 1,
5 wherein said segment comprises genomic clone T11 or cDNA clone TR4.
3. A DNA segment, according to claim 1, wherein said protein has the amino acid sequence defined in Figure 3.
- 10 4. A recombinant DNA molecule comprising a DNA segment according to claim 1 and a vector.
5. A culture of cells transformed with a DNA segment according to claim 1.
- 15 6. A method of producing a human type α PDGF receptor protein comprising culturing cells according to claim 5 under conditions such that said protein is produced and isolating said protein from said cells.
- 20 7. A human type α PDGF receptor protein having the amino acid sequence defined in Figure 3.

8. An antibody specific for a protein having the amino acid sequence of a type α human PDGF receptor protein, according to claim 7.

5 9. An antibody according to claim 8, wherein said antibody is specific for only a type α PDGF receptor protein.

10 10. An antibody specific for a protein having the amino acid sequence of a type β human PDGF receptor protein, wherein said antibody is specific for only a type β human PDGF receptor protein.

11. A bioassay for expression of a type α PDGF receptor gene comprising the steps of:

- 15 i) contacting a biological sample suspected of containing RNA with a DNA probe comprising a DNA segment according to claim 1, under conditions such that a DNA:RNA hybrid molecule containing said DNA probe and complementary RNA is
- 20 formed; and
- ii) determining the amount of said DNA probe present in said hybrid molecules.

12. A bioassay for a type α PDGF
receptor antigen comprising the steps of:

- 5 i) contacting a biological sample
 suspected of containing
 polypeptides with an antibody
 according to claim 8, under
 conditions such that a specific
 complex of said antibody and said
 antigen is formed; and
- 10 ii) determining the amount of said
 antibody in said complexes.

13. A bioassay for type β PDGF receptor
antigen comprising the steps of:

- 15 i) contacting a biological sample
 suspected of containing
 polypeptides with an antibody
 according to claim 10, under
 conditions such that a specific
 complex of said antibody and said
20 antigen is formed; and
- ii) determining the amount of said
 antibody in said complexes.

13. A bioassay for type β PDGF receptor antigen comprising the steps of:

- i) obtaining a biological sample containing polypeptides;
- 5 ii) reacting said sample with an antibody according to claim 10; and
- iii) determining the amount said antibody bound by said polypeptides.